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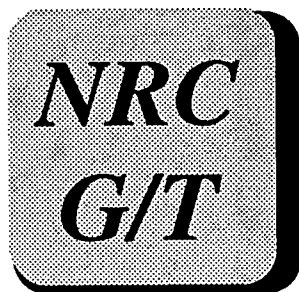
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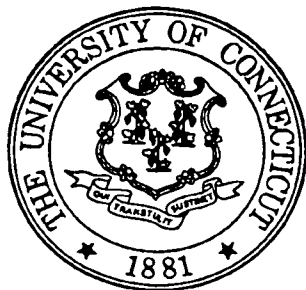
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## ABSTRACT

This study compared the gifted program performance of 121 economically disadvantaged students identified by using the Research-Based Assessment Plan (RAP) and 166 students who were not economically disadvantaged identified through traditional identification methods. The study also compared the RAP-identified students' attitudes toward school to the attitudes of the traditionally identified students and compared the attitudes of parents of RAP-identified students toward the gifted program and the attitudes of parents of traditionally identified students. Results showed that RAP-identified students and traditionally identified students displayed significantly different performances and attitudes. On teacher ratings of performance, RAP-identified students received higher ratings on their interaction with others, while traditionally identified students had higher ratings on critical thinking. On the student attitude instrument, RAP-identified students were rated higher on: (a) helping teachers plan, (b) learning outside the classroom, (c) sitting with friends, and (d) working on special things. No significant differences were found in parent attitudes, which were generally found to be positive. Appendices include descriptions of gifted characteristics, pilot study instrumentation, the Frasier Talent Assessment Profile (which was used to record all assessment information), a scale for rating students' participation, and a parent questionnaire on students' performance. (Contains 25 references.) (Author/CR)



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# **THE NATIONAL RESEARCH CENTER ON THE GIFTED AND TALENTED**

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## **ABSTRACT**

The performance of students identified as gifted through the Research-Based Assessment Plan (RAP) was studied during their first year of placement in gifted programs. Their attitudes and the attitudes of their parents toward the gifted program placements were also studied. Performances and attitudes of parents and students identified through traditional criteria were used as a comparison. Results of MANOVAs showed that RAP identified students and traditionally identified students displayed significantly different performances and attitudes. On teacher ratings of performance, RAP identified students received higher ratings than traditionally identified students on Interaction with Others, while traditionally identified students exceeded RAP identified students' ratings on Use of Critical Thinking. On the student attitude instrument, RAP identified students were higher than traditionally identified students on four items: (a) Help Teachers Plan, (b) Learn Outside the Classroom, (c) Sit with Friends, and (d) Work on Special Things. No significant differences were found in parent attitudes, which were generally positive from the parents of both traditionally identified students and RAP identified students. These results provide a beginning foundation for the validity of the RAP as a process for identifying economically disadvantaged students as gifted.

# **Performance of Economically Disadvantaged Students Placed in Gifted Programs Through the Research-Based Assessment Plan**

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## **EXECUTIVE SUMMARY**

### **Introduction**

The research project of The National Research Center on the Gifted and Talented (NRC/GT) at the University of Georgia has been specifically designed to address issues related to the underrepresentation of economically disadvantaged students (hereafter referred to as target students) in gifted programs. The research has focused on investigating the characteristics of gifted target students and using knowledge of these characteristics to develop an identification system based on the manifestations of giftedness within and across cultural groups. The groups included in the research were target students from African American, Asian American, Hispanic, Native American, and White populations.

### **Assumptions**

The research was anchored on three basic assumptions about gifted education for target students. First, the researchers believed that significant numbers of target students exist who are not placed in gifted programs, not because of lack of cognitive, motivational, artistic, or creative potential, but because traditional criteria do not assess the skills, knowledge, or aptitudes they do possess. Second, the demonstration of gifted behaviors is affected by a student's sociocultural context, but is not limited by interpretations within that context. Third, the search for a paradigm to guide the identification of gifts and talents in target students must be embedded within the sociocultural and economic contexts of the target students.

### **Pilot Study**

Based on these assumptions, a list of ten traits, aptitudes, and behaviors (TABs) associated with giftedness was developed as a basis for an identification process (Motivation, Interests, Communication Skills, Problem Solving Ability, Memory, Inquiry, Insight, Reasoning, Imagination/Creativity, Humor), and a pilot study was initiated in five Georgia school districts and one school district in North Carolina. The students in the pilot study primarily represented economically disadvantaged African American, Native American, or White students from rural, suburban, and urban communities.

The pilot study had two major thrusts. First, educators in each district were trained in the definition of the 10 TABs. The training was primarily intended to assist teachers in

identifying manifestations of the TABs in their students, and to provide them with tools for recording their observations. At some sites, however, the questions asked by teachers indicated a need to help some change their attitudes about the existence of giftedness in economically disadvantaged populations.

The second thrust was an intensive assessment of target students. For the first phase of the assessment, which flowed naturally out of the training component, teachers used the TABs as a guide to nominate students. The second phase, which was called the Research-Based Assessment Plan (RAP), involved data gathering on multiple assessments, including aptitude tests, achievement tests, creativity tests, writing samples, motivational inventories, and teacher ratings.

As part of the second phase, all assessment information was recorded by staff members of the NRC/GT on the four page summary known as the *Frasier Talent Assessment Profile (F-TAP)* (see Appendix C). Quantitative data from the assessments were recorded on a graph on the second page. A profile of each student was created by connecting data points on the graph. Ratings and anecdotal information from the teacher observations were recorded in the Referral section of the third page. Narrative information from the assessments was also recorded on the third page in a section titled Advocacy.

Each school was provided with a completed *F-TAP* for each target student nominated in its school area. Leadership teams consisting of district-level gifted education personnel, building-level administrators, teachers of the gifted, and regular classroom teachers were formed in each school district under the direction of local school personnel. Some sites formed these teams at the district level; others formed them at the school level. With a facilitator from the NRC/GT, these teams reviewed the profiles and made decisions about the placement of target students into gifted programs. The facilitator was present to help the teams focus on all of the data, not just on selected pieces. The teams were encouraged not to focus on any one piece of data to the exclusion of others. Discussion among group members centered on the patterns of strengths and weaknesses made evident from the data on the *F-TAP* and understanding these in the context of the culture from which the student came. Decisions were made by group consensus, rather than by pre-established criteria, as to whether or not placement in the existing gifted program should occur or if further information was needed. The decision was then recorded on the first page of the *F-TAP*.

A total of 327 target students were nominated. Of these, 121 students were eventually placed in gifted programs, none of whom would have been placed under traditional criteria. These RAP identified students were the focus of the study of the pilot project known as the Program Performance Study.

Through the cooperation of the State Department of Education in Georgia, these students were placed in gifted programs without prejudice, meaning that the state would provide the full-time equivalent pay to school districts for students identified as gifted through RAP, even though they did not meet state criteria for gifted identification. Further, the students generally received no services or specific interventions other than those already in place in a district's gifted program.

Though the districts in the pilot study represented a wide range from rural to urban schools, the gifted programs in which the RAP identified students were placed were basically very similar. All six districts employed a resource room/pull-out model for serving elementary age students. Instruction in these programs focused on the basic content areas of language arts, social studies, mathematics, and science. One or two also included arts, humanities, or foreign language. All the programs emphasized thinking and



research skills. Three districts included specific components for social and emotional development of gifted students.

Middle school programs generally involved honors classes or resource rooms in specific content areas. Exceptions to this included a middle school program based on the more general resource room model used at the elementary level. One school piloted a program in which gifted program teachers augmented the curriculum for identified students by working with the regular education team to which students had been assigned.

The common element among the high school programs was an opportunity for independent study. This was often supported with seminars and, in some cases, was extended with mentorships or internships. Four of the school districts offered Advanced Placement courses. It is interesting to note that the two that did not were the most rural school districts in the pilot group.

## **Research Questions**

The Program Performance Study dealt with three major research questions. These were:

- (1) How do RAP identified students compare to traditionally identified students on teacher ratings of gifted program performance?
- (2) How do RAP identified students compare to traditionally identified students on attitudes toward school?
- (3) What are the attitudes of parents of RAP identified students toward the gifted program experience of their children, and how do these attitudes compare with those of parents of traditionally identified students?

## **Rationale for the Study**

An investigation of the performance of RAP identified students in gifted programs was important for two reasons. First, it could provide predictive validity for the identification procedures used to place the students in the gifted program. That is, if the identification procedure was useful, one could expect that RAP identified students would perform in their respective gifted programs at least as well as traditionally identified students. Given an identification process based on a richer conceptualization of giftedness and operationalized in a more complex manner, an assumption could be made that students so identified should be able to perform at least as well as, and perhaps better than, students identified through the traditional means based on a simplistic procedure such as minimum IQ scores. One could expect this, even though no adjustments for the non-traditionally identified children were made to the curriculum of the gifted program. A prerequisite to this expectation, however, would be that the richer conception of giftedness and more complex procedure for identification included the more simplistic view (i.e., giftedness as indicated by a minimum IQ).

The second reason for an investigation of the performance of RAP identified students in gifted programs is that attitudes toward students identified through alternative means could be an important external factor affecting their performance in the gifted program. If negative attitudes were part of the experience for students placed in gifted programs through means other than IQ, their performance might not reflect their true level

of abilities. Thus it was important to investigate the parents' and students' attitudes about their participation in a gifted program.

This study, then, provided an examination of these issues. Did the RAP identified students perform well in the program? What were the attitudes of students and their parents about their participation?

## **Review of Literature**

### **Performance in Program as a Validity Criterion**

Traditionally, the criterion for the validity of an identification procedure has been performance on IQ tests. The review of literature by Gear (1976) provided classic examples of this type of research. However, Renzulli and Delcourt (1986) have challenged the appropriateness of the IQ test as a criterion for gifted identification procedures, citing the more complex definitions of giftedness that include intellectual aptitude, but that go far beyond in describing processes or traits exhibited by gifted individuals. Renzulli and Delcourt suggested that validation studies based on performance were more legitimate.

Hoge and Cudmore (1986) have also criticized the IQ test-as-criterion validation studies. They stated that "the absence of any empirical data relevant to [success or failure within the gifted program] is a serious matter that should be remedied as soon as possible" (p. 194). Hoge (1988) has further stated that some of the most important information that should be gathered to study the validity of an identification process is performance of the students in the gifted program. This is, he contended, the reason for the use of an identification procedure in the first place. Performance can, of course, be measured in a variety of ways, including testing, teacher ratings, or product analysis. This study focuses on teacher ratings of performance as one source of evidence about the validity of the identification process used in the pilot study.

### **Attitudes About Gifted Programs**

While the use of students' performance in the program as a validity criterion is recommended, this criterion may be influenced by other factors. One specific concern with this criterion is the influence of the attitudes people may hold about the presence of certain students in a gifted program. The attitudes of teachers, parents, and students can affect actual performance or the perceptions others have about student performance.

Guskin, Peng, and Simon (1992) found that teachers' judgments of students were strongly influenced by stereotypical beliefs about patterns of giftedness. This was especially the case when looking at SES differences, in which children of lower socioeconomic status were seen as less confident than children of middle socioeconomic status. This corroborated earlier research by Thomas (1991) in which it was found that teachers often focused on personal and family observations of bright children from economically disadvantaged populations, and that a substantial percentage (41%) of the observations reflected negative views. If the attitudes reported by Guskin et al. and by Thomas hold true, students from economically disadvantaged populations can often expect to be rated lower on criteria for performance in a program, even though their performance may not markedly differ from that of others in the program.

Studies have also shown that students in gifted programs generally have positive attitudes about their participation (Colangelo & Kelly, 1983; Karnes & Whorton, 1988;

Kerr, Colangelo, & Gaeth, 1988). Intuitively, it seems that a student's positive attitude would influence successful performance in the program. The reverse may also hold that negative attitudes could result in lack of success.

A major problem, however, in considering this issue is what influence these attitudes may have on ratings of success. If teachers are positive about the participation of students from economically disadvantaged backgrounds or limited English proficient populations, they may rate student performance in the program higher than it actually is (known as the halo effect). On the other hand, negative attitudes may result in lower ratings. Similarly, if the attitudes of parents and students are highly positive, they may rate their participation in the program higher than it actually is. Obviously, negative attitudes could result in lower ratings. Either outcome could result in misinterpretation of performance in program data. During this study, data on the attitudes of parents and students were gathered. Data on teacher attitudes were gathered during the first year of the pilot study and are not reported here.

## **Method**

In order to explore more fully the impact of RAP, this study employed a quasi-experimental design. Specific analyses for different aspects of the research are described below.

### **Sample**

Participants were drawn from six school systems in the Southeast that had participated in the pilot study. The sample consisted of 121 students who had been identified as gifted using the Staff Development Model (SDM) and RAP. Students identified during the pilot were African American, Native American, and White, with only small numbers from other ethnic groups. All were qualified for free/reduced lunch.

A comparison group of 166 students identified through the state's traditional identification process was also selected from each of the sites where the pilot study had been implemented. Comparison students were from the same schools and were served in the same programs as the RAP identified students. Members of the comparison group were predominantly White; none were African American. Further information on ethnic group membership is not available on comparison group students as school district personnel claimed providing such information would violate the law. However, no one in the comparison group qualified for free or reduced lunch.

Attrition in the RAP identified group was quite high. Of the 121 students originally placed in gifted programs during the spring of 1991, 109 actually entered the gifted programs in the fall of 1992. Of the 109 students, complete data were available on only 68 students by the end of the 1992-1993 school year. Of the RAP identified students not remaining in the study, 62% moved to other schools not involved in the pilot. An additional 34% were students who remained in the gifted program but who did not complete the data-collection process. School district personnel attributed the failure to gather these data to problems with specific school administrators in one school and to scheduling problems with other individuals at other schools.

## Instrumentation

Three instruments were used to collect data. The *Scale for Rating Student's Participation in the Local Gifted Education Program* (Renzulli & Westberg, 1991) was designed to obtain a gifted education teacher's rating of a student's performance in the gifted program. The *Arlin-Hills Attitude Toward Learning Processes Scales* (Arlin, 1976) was designed to assess students' attitude toward learning. The *Parent Questionnaire Regarding Child's Gifted Class Performance* (NRC/GT at UGA, 1992) was used to obtain information about parents' perceptions of their child's performance in the gifted program.

## Procedures

Pilot site representatives met in the fall to receive training on data collection procedures. The plan for gathering data for this study was presented. A packet of forms, information about instruments used in the pilot study, and the proposal for the program performance study were given to everyone who attended the meeting.

Following the meeting, the pilot site representatives were sent another packet of materials that included instructions for data collection and permission forms to be collected from the parents of the students participating in this study. Because of the types of information being gathered, it was necessary that the students be in the gifted class for a significant period of time prior to the administration of the instruments. The first round of data collection using all three instruments occurred at the beginning of the second semester. Posttest data were collected at the end of the second semester. Upon receipt of the completed questionnaires, data entry began. As the data were entered, respondent identifying information was destroyed.

## Analyses

Quantitative data consisted of three separate analyses. Multiple analyses of variance (MANOVAs) with a group by item design were conducted on scores from the three instruments. Cases with missing data were deleted from the analysis. Where significant F-ratios were achieved with alpha set at .05, post hoc assessment of dependent variables was done through interpretation of a loading matrix.

However, because the numbers of students in the two groups were so unequal (166 traditionally identified students to 68 project identified students), possible violation of the assumption of homogeneity of variance was indicated. A check of sample sizes and variances in each cell was conducted and was found to be within acceptable limits. Thus, a formal test of homogeneity of variance was unnecessary, given the robustness of the statistical procedure to be used against violation of the assumption.

Further, given the high mortality of the subjects in the study, an analysis of pretest scores was conducted for those who completed only a pretest and those who completed both a pretest and a posttest. While no significant differences were found between the groups of parents and teachers on the pretest scores of their respective instruments, there were significance differences between the two groups on the student instrument. Therefore, it was determined to abandon the original intent to conduct repeated measures analyses and to do analyses comparing the two groups on pretest results only. It should be remembered that these results were gathered at midyear.

Content analyses were conducted on the responses to open-ended parent questionnaire items. For most items, this involved categorizing each response as positive,

negative, or neutral. For one item, responses were put into categories by theme. Categorizations were done by two members of the NRC/GT staff.

## Results

### Scale for Rating Student's Participation in the Local Gifted Education Program

A MANOVA using group as the independent variable and each item as the dependent variables was conducted on the *Scale for Rating Student's Participation in the Gifted Program* (Renzulli & Westberg, 1991). The results of this analysis were significant [(Wilks Lambda=.8642,  $F(10, 186)=2.9236$ ,  $p=.0020$ )]. The structure loadings indicated that differences between the RAP identified group and the traditionally identified group were primarily the result of Interaction with Others ( $r=-.4429$ ), and secondarily of Use of Critical Thinking ( $r=.3330$ ). Group means and standard deviations for these items indicated that on Interaction with Others RAP identified students ( $\bar{X}=4.38$ ,  $SD=.85$ ) were rated more highly than traditionally identified students ( $\bar{X}=4.05$ ,  $SD=.96$ ). On the secondary variable of Use of Critical Thinking, traditionally identified students ( $\bar{X}=3.90$ ,  $SD=.94$ ) received higher ratings than RAP identified students ( $\bar{X}=3.63$ ,  $SD=.90$ ). A rating of 4 on this instrument indicated that a student displays the behavior to a high degree.

### Arlin-Hills Attitude Toward Learning Processes

The second analysis consisted of a MANOVA with group as the independent variable and responses to the 15 items of the *Arlin-Hills Attitude Toward Learning Processes* (Arlin, 1976) as the dependent variables. Results indicated a statistically significant group effect (Wilks Lambda=.8530,  $F(15,162)=1.8613$ ,  $p=.0307$ ). The structure loadings indicated that the significant difference between groups was defined primarily by the items Help Teacher Plan ( $r=.6467$ ) and Learn Outside the Classroom ( $r=.4266$ ). Secondary definition was provided by the items Sit with Friends ( $r=.3623$ ) and Work on Special Things ( $r=.3313$ ). The primary variable for interpreting the differences between groups, Help Teacher Plan, was given higher ratings by RAP identified students ( $\bar{X}=2.25$ ,  $SD=1.03$ ) than by traditionally identified students ( $\bar{X}=1.82$ ,  $SD=.90$ ). The other primary defining variable, Learn Outside the Classroom, was also rated more highly by RAP identified students ( $\bar{X}=2.28$ ,  $SD=1.11$ ) than by traditionally identified students ( $\bar{X}=1.96$ ,  $SD=1.09$ ). For the variables that define the linear combination secondarily, RAP identified students again gave higher ratings. On the item Sit with Friends, the mean for RAP identified students was 2.82 ( $SD=1.16$ ) compared to a mean of 2.51 ( $SD=1.17$ ) for traditionally identified students. On the item Work on Special Things the mean for RAP identified students was 2.52 ( $SD=1.08$ ), with the mean for traditionally identified students at 2.22 ( $SD=1.06$ ). On this instrument, a rating of 2 indicated "sometimes," while a rating of 3 indicated "usually."

### Parent Questionnaire Regarding Child's Gifted Class Performance

#### Quantitative Analysis

The MANOVA for the parent attitude questionnaire, with group as the independent variable and separate items as dependent variables, did not yield a significant difference for a group effect (Wilks Lambda=.7973,  $F(22, 139)=1.6062$ ,  $p=.0530$ ). No post hoc analyses were done. In general both groups of parents produced mean ratings of about 3



or 4 to most items, with 3 meaning "average" and 4 meaning "high." A few items (i.e., Problems with Friends, Concerns about Difficulty, and Stresses from Gifted Class) received ratings averaging about 2, meaning "low."

## **Content Analysis**

Six items on the parent questionnaire called for open-ended responses from the parents. These responses were consistent with the general findings of the quantitative analysis. There were few differences in responses between the parents of traditionally identified students and students identified through the research project. Responses to questions about what the children were saying about the experience, about the children's attitudes toward learning, and any additional feedback were generally positive. Responses to questions dealing with problems, concerns, stresses indicated that students in the gifted programs did experience some problems with their friends and found homework to be stressful within the programs.

## **Discussion**

### **Comparisons of Gifted Program Performance**

Based on teacher ratings of performance in the gifted program, students identified through the RAP performed just as well as traditionally identified students in most areas. Average ratings for both groups indicated that teachers believed students in the program, regardless of type of identification, were performing at high levels. However, RAP identified students' ratings in interaction with others significantly exceeded those for traditionally identified students. Traditionally identified students were rated significantly higher in use of critical thinking.

One challenge to these findings might be that RAP identified students were rated more highly by their teachers because of the hopes these teachers held for the students' success. However, the size of the standard deviation for both groups indicated a fair amount of variability in rating the students' performances. This would show an attempt on the part of the teachers to be professional and fair in their ratings.

The difference in ratings on the use of critical thinking may reveal a need to alter curriculum in the program to include some critical thinking skills development so that RAP identified students become proficient at applying these skills appropriately. However, the lack of differences on other process skills, knowledge, and quality of products would not indicate a need to lower curricular standards, a concern many have when alternative identification procedures are introduced.

### **Comparisons of Student Attitudes**

RAP identified students were significantly more positive than traditionally identified students on ratings of a number of variables related to their attitudes toward learning. Variables contributing to the statistically significant difference between the two groups included opportunities to help the teacher plan learning experiences, to learn outside the classroom, to work with friends, and to work on special things.

The finding related to opportunities for learning outside the classroom seems important given the low socioeconomic status of the students placed in gifted programs through the RAP. It may be that, compared to their fellow middle class students, RAP

identified students would have fewer extracurricular learning experiences (e.g., trips to museums, concert halls, zoos, and camps) provided by their families and, thus, would be more appreciative of those experiences provided by the schools.

It seems particularly important to note differences indicated by teacher ratings of student interaction with other students and in student ratings of opportunities to work with friends. One stereotypic view of low SES minority culture is that support is not provided within the culture for academic achievement, that the culture views academic achievement as a sort of treason, as capitulating to majority cultural values. Yet, students identified through the RAP seem to have found a base of support among their friends within an academically challenging program. However, the parents of both RAP identified students and traditionally identified students indicated on an open-ended question that they experienced some difficulty with friends after their identification as gifted.

### **Comparisons of Parent Attitudes**

The parents of both traditionally and project identified students gave the gifted programs high ratings, and each group held similar concerns. This could indicate that parents of both groups provide support for their children's work in gifted programs and challenges myths about the interest level parents from low SES minority communities have in their children's education.

### **Implications and Conclusions**

One purpose of this investigation was to provide some data on the validity of a multiple assessment approach that relies heavily on professional judgment for placement of students in the program. Based on the teachers' ratings of performance of RAP identified students, when compared to ratings of traditionally identified students, RAP appeared to be a valid approach. While additional investigations are needed to examine the creative productivity of these students, as suggested by Renzulli and Delcourt (1986), as they continue their placements in gifted programs, the students demonstrated to their gifted program teachers' satisfaction that they were capable of participating in gifted programs with enthusiasm and skill.

Further, the high teacher ratings indicated that the gifted program teachers did not resent the presence of students identified through alternative means, or, if they did hold resentment for the students, they were able to provide positive assessments of the students' performance. Further, the parents of economically disadvantaged students were not disinterested in their children's education, but were appreciative and supportive of the opportunities their children were receiving. The students also had generally positive attitudes about the gifted programs and in particular believed they had opportunities to interact and work with friends. This combination of high teacher ratings of performance and positive parent and student attitudes should combine for successful future performance by these students. Of course, data were collected for this study after only one semester of involvement in the gifted program. Further research is needed to determine the longevity of these positive attitudes.

Even with the positive results reported, one concern in this study was the high attrition rate of students placed through the RAP. Many of the students who were placed but did not continue in the study were lost due to transfers to other schools. This may suggest the need to consider the effects of transience on the identification of economically

disadvantaged children, or it could merely be an artifact of the pilot study in which only certain schools within a district participated in the program.

However, these data begin to establish a foundation of support for the notion of using multiple criteria coupled with professional decision-making as a basis for identification of students as gifted. Under certain conditions, gifted students can successfully be found in economically disadvantaged populations without relying on critical judgments such as cut-off scores or weighted matrices. These conditions include a good understanding of core traits, aptitudes, and behaviors (TABs) associated with giftedness; careful observation of culturally-influenced manifestations of those TABs; multiple assessments of children that provide a comprehensive profile of their abilities; decision-making based on a holistic interpretation of a child's profile with a focus on his or her particular strengths; treatment of teachers as professionals by providing training that permits them to meet the previous conditions, and acknowledgment of teachers' expertise in the decision-making process.



## References

- Arlin, M. (1976). *Attitude toward learning processes*. Chesterfield, MO: Psychologists & Educators.
- Colangelo, N., & Kelly, K. R. (1983). A study of student, parent, and teacher attitudes toward gifted programs and gifted students. *Gifted Child Quarterly*, 27, 107-110.
- Gear, G. H. (1976). Accuracy of teacher judgement in identifying intellectually gifted children. *Gifted Child Quarterly*, 20, 478-490.
- Guskin, S. L., Peng, C-Y. J., & Simon, M. (1992). Do teachers react to "multiple intelligences"? Effects of teachers' stereotypes on judgments and expectancies for students with diverse patterns of giftedness/talent. *Gifted Child Quarterly*, 36, 32-37.
- Hoge, R. D. (1988). Issues in the definition and measurement of the giftedness construct. *Educational Researcher*, 17(7), 12-16, 22.
- Hoge, R. D., & Cudmore, L. (1986). The use of teacher-judgment measures in the identification of gifted pupils. *Teaching and Teacher Education*, 2, 181-196.
- Karnes, F. A., & Whorton, J. E. (1988). Attitudes of intellectually gifted youth toward school. *Roeper Review*, 3, 173-175.
- Kerr, B., Colangelo, N., & Gaeth, J. (1988). Gifted adolescents' attitudes toward their giftedness. *Gifted Child Quarterly*, 32, 245-247.
- National Research Center on the Gifted and Talented at The University of Georgia. (1992). *Parent questionnaire regarding child's gifted class performance*. Unpublished document. Athens, GA: Author.
- Renzulli, J. S., & Delcourt, M. A. B. (1986). The legacy and logic of research on the identification of gifted persons. *Gifted Child Quarterly*, 30, 20-23.
- Renzulli, J. S., & Westberg, K. L. (1991). *Scale for rating students' participation in the local gifted education program*. Unpublished document. Storrs, CT: University of Connecticut.
- Thomas, L. S. (1991). *A survey of the attributes of bright students from economically disadvantaged families and areas: How teachers describe these students*. Unpublished master's thesis. University of Georgia, Athens.

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# **Performance of Economically Disadvantaged Students Placed in Gifted Programs Through the Research-Based Assessment Plan**

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## **Introduction**

The research project of The National Research Center on the Gifted and Talented (NRC/GT) at the University of Georgia has been specifically designed to address issues related to the underrepresentation of economically disadvantaged students (hereafter referred to as target students) in gifted programs. The research has focused on investigating the characteristics of gifted target students and using knowledge of these characteristics to develop an identification system based on the manifestations of giftedness within and across cultural groups. The groups included in the research were target students from African American, Asian American, Hispanic, Native American, and White populations.

## **Assumptions**

The research project was anchored on three basic assumptions about gifted education for target students. First, the researchers believed that significant numbers of target students exist who are not placed in gifted programs, not because of lack of cognitive, motivational, artistic, or creative potential, but because traditional criteria do not assess the skills, knowledge, or aptitudes they do possess. This has long been recognized as one of the most troubling issues in gifted education (Frasier, 1991; Frasier & Passow, 1994; Office of Educational Research and Improvement, 1993).

Second, the demonstration of gifted behaviors is affected by a student's sociocultural context, but is not limited by interpretations within that context (Frasier & Passow, 1994). That is, culturally relevant manifestations of giftedness may have value outside the culture of the child, as well as within it. For example, within a certain cultural group there may be particular ways of communicating about and with the environment that may also be valued as good analogical thinking or ecological awareness in the mainstream culture. The task for educators is to understand these behaviors within the contexts most appropriate for interpretation.

Third, the search for a paradigm to guide the identification of gifts and talents in target students must be embedded within the sociocultural and economic contexts of the target students (Frasier & Passow, 1994). Community and educational leaders from within each cultural group should be given opportunities to provide input on the means by which students are identified for special school services. While this can involve participation in decision-making processes directly, it will usually consist of discussions to understand

specific behaviors or attitudes often shown by students from a particular cultural group, rather than consideration of programming decisions for a specific student.

These three assumptions guided the development of a process for identifying students from economically disadvantaged populations as gifted. The study of this process was investigated in three parts: (a) an initial pilot study, (b) a follow-up of the pilot study, and (c) a national field test. The results reported here are from the follow-up of the pilot study. The pilot study itself is briefly described to give a context for the follow-up.

### **Pilot Study**

Based on three assumptions previously discussed, a list of ten traits, aptitudes, and behaviors (TABs) associated with the giftedness construct was developed (Motivation, Interests, Communication Skills, Problem Solving Ability, Memory, Inquiry, Insight, Reasoning, Imagination/Creativity, Humor). These TABs represent one list of attributes of giftedness that seem to cut across cultural boundaries (Frasier & Passow, 1994). The labels and descriptors of these TABs are provided in Appendix A. The TABs formed the initial basis for the process of identifying students from target populations as gifted.

The pilot study of the process was initiated in five Georgia school districts and one school district in North Carolina. Demographics for each of these districts are provided in Table 1 on the following page. Essentially, the students in the Georgia schools represented economically disadvantaged African American or White students from rural, suburban, and urban communities. The North Carolina district had an almost entirely Native American population.

The pilot study had two major thrusts. First, educators in each district were trained in the definition of the 10 TABs. The training was primarily intended to assist teachers in identifying manifestations of the TABs in their students within the cultural context or the student, within the culture of the school, or within both cultures. The training also provided teachers with tools for recording their observations. At some sites the leaders of the training felt that the questions asked by teachers indicated a need to help some change in their attitudes about the existence of giftedness in economically disadvantaged populations. If this was the case, the training also included discussion and activities.

The second thrust was an intensive assessment of target students. For the first phase of the assessment, which flowed naturally out of the training component, teachers used the TABs as a guide to nominate students. The second phase, which was called the Research-Based Assessment Plan (RAP), involved data gathering on multiple assessments, including aptitude tests, achievement tests, creativity tests, writing samples, motivational inventories, and teacher ratings. A complete listing of the assessments is provided in Appendix B. Not every assessment instrument was used in every district. If a district conducted census achievement testing a particular grade level, those scores were used in place of administering a separate achievement test just for this study. Similar latitude was given to the districts on the aptitude tests. This procedure was considered acceptable for two reasons: (a) a desire on the part of the researcher not to endorse any particular instrument as being an ideal instrument for identifying gifted learners from economically disadvantaged populations, and (b) a focus on evaluating a profile of assessment information for placement decisions rather than on establishing cut-off scores on specific instruments.

Table 1

Demographic Profiles of Pilot Sites

Population Type	Median Family Income	Number of Schools	Ethnicity by Percentage of District Enrollment	
Urban	\$23,000	39	White	38
			African American	62
			Other	>1
Rural	\$23,000	2	White	5
			Native American	95
Rural	\$20,000	18	White	46
Suburban			African American	51
Urban			Other	3
Suburban	\$37,000	58	White	54
Urban			African American	42
			Asian	3
			Hispanic	2
			Other	>1
Suburban	\$38,000	61	White	90
			African American	5
			Asian	3
			Hispanic	3
			Other	>1
Rural	\$10,000	4	White	40
			African American	60

As part of the second phase, all assessment information was recorded by staff members of the NRC/GT on the *Frasier Talent Assessment Profile (F-TAP)* shown in Appendix C. Quantitative data from the multiple assessments were recorded on the graph on the second page. A profile of each student's performance on these assessments was created by connecting data points on the graph. This profile created a histogram that aided decision-makers in identifying strengths and weaknesses that the assessments may have uncovered. Ratings and anecdotal information from the teacher observations were recorded in the Referral section of the third page. These related directly to the ten TABs that formed the basis for the initial training. Narrative information from the assessments, as well as from teacher observations that could not be recorded elsewhere, was recorded in the Advocacy section of the third page.

Each school was provided with a completed *F-TAP* for each target student who had been nominated from that school. Leadership teams consisting of district-level gifted education personnel, building-level administrators, teachers of the gifted, and regular classroom teachers were formed in each school district under the direction of local school personnel. Some sites formed these teams at the district level; others formed them at the school level.

With a facilitator from the NRC/GT, these teams reviewed the profiles and narrative information and made decisions about the placement of target students into gifted programs. The facilitator from the NRC/GT was present, not to tell the teams what decisions should be made, but to help the teams focus on all the data, rather than on selected pieces. Through this, the teams were encouraged not to pay attention to any one piece of data to the exclusion of others, but to consider all the data as a whole. Discussion among group members centered on the patterns of strengths and weaknesses made evident from the data on the *F-TAP* and understanding these in the context of the culture from which the student came. Decisions were made by group consensus, rather than by preestablished criteria, as to whether or not placement in the existing gifted program should occur, if further information was needed, or if placement in the gifted program was not indicated. The innovation here was not so much in the kinds of information considered, although some of that was also non-traditional, but in the way the information was treated and the way in which the decision was made. Ultimately the decision reached by the group was recorded on the first page of the *F-TAP*.

The fourth page of the *F-TAP*, which suggests different areas of curriculum planning, was not employed at this time. Considerable time had been given to making the program placement decision, and the NRC/GT staff, in consultation with pilot site coordinators, determined that further decision-making demands on the leadership could not be completed in the time remaining during the school year. However, some individual teams determined on their own that they would make recommendations for specific programming for a child, based on the pattern of strengths identified, regardless of which placement decision had been made relative to the gifted program.

A total of 327 target students were nominated from the pilot sites. Of these, 121 were eventually placed in gifted programs, none of whom would have been placed under traditional criteria. The Research-Based Assessment Plan (RAP) identified students were the focus of this follow-up study of the pilot project, known as the Program Performance Study.

Through the cooperation of the State Department of Education in Georgia, the students from Georgia pilot sites were placed in gifted programs without prejudice, meaning that the state would provide the full-time equivalent pay to school districts for students identified as gifted through RAP, even though they did not meet state criteria for



gifted identification<sup>1</sup>. Because of the special status of the North Carolina pilot site, which was under the auspices of the Bureau of Indian Affairs, no such coordination with the state school's leadership was necessary.

Within the gifted programs, the students generally received no services or specific interventions other than those already in place in a district's gifted program. Expectations of student performance within the program were the same for all students regardless of the identification route taken to place them in the program.

Though the districts in the pilot study represented a wide range from rural to urban schools, the gifted programs in which the RAP identified students were placed were basically very similar. All six districts employed a resource room/pull-out model for serving elementary age students. Instruction in these programs focused on the basic content areas of language arts, social studies, mathematics, and science. One or two also included arts, humanities, or foreign language. All the programs emphasized thinking and research skills. Three districts included specific components for social and emotional development of gifted students.

Middle school programs generally involved honors classes or resource rooms in specific content areas. Exceptions to this included a middle school program modeled on the more general resource room model used at the elementary level. One school piloted a program in which gifted program teachers augmented the curriculum for identified students by working with the regular education team to which students had been assigned.

The common element among the high school programs was an opportunity for independent study. This was often supported with seminars and, in some cases, was extended with mentorships or internships. Four of the school districts offered Advanced Placement courses. It is interesting to note that the two that did not were the most rural school districts in the pilot group.

## Research Questions

The Program Performance Study served as a follow-up to the placements RAP identified students received. It dealt with three major research questions. These were:

- (1) How do RAP identified students compare to traditionally identified students on teacher ratings of gifted program performance?
- (2) How do RAP identified students compare to traditionally identified students on attitudes toward school?
- (3) What are the attitudes of parents of RAP identified students toward the gifted program experience of their children, and how do these attitudes compare with those of parents of traditionally identified students?

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<sup>1</sup>In Georgia, state criteria for kindergarten through twelfth grade require a score at the 99th percentile on age norms of an approved aptitude test for placement in the gifted program. Beginning in third grade, a score at the 96th percentile is acceptable if it accompanied by a composite score at the 85th percentile on an achievement test or a total reading or total math score at the 90th percentile on an achievement test.



## **Rationale for the Study**

An investigation of the performance of RAP identified students in gifted programs was important for at least two reasons. First, it could provide predictive validity for the identification procedures used to place the students in the gifted program. That is, if the identification procedure was useful, one could expect that RAP identified students would perform in their respective gifted programs at least as well as traditionally identified students. Given an identification process based on a richer conceptualization of giftedness and operationalized in a more complex manner, an assumption could be made that students so identified should be able to perform at least as well as, and perhaps better than, students identified through the traditional means based on a simplistic procedure such as minimum IQ scores. One could expect this even though no adjustments for the non-traditionally identified children were made to the curriculum of the gifted program. A prerequisite to this expectation, however, would be that the richer conception of giftedness and more complex procedure for identification included the more simplistic view (i.e., giftedness as minimum IQ score). A quick perusal of the TABs and the instruments used in the assessment indicates that this was also the case for RAP. However, no cut-off score was set for the IQ test, rather it was imbedded in the profile as one potential indicator of strengths and weaknesses.

The second reason for an investigation of the performance of RAP identified students in gifted programs is that attitudes toward students identified through alternative means could be an important external factor affecting their performance in the gifted program. If negative attitudes were part of the experience for students placed in gifted programs through means other than IQ, their performance might not reflect their true level of abilities. Thus it was important to investigate the parents' and students' attitudes about their participation in a gifted program.

This study, then, provided an examination of these issues. Did the RAP identified students perform well in the program? What were the attitudes of students and their parents about their participation?

## **Review of Literature**

### **Performance in Program as a Validity Criterion**

Traditionally, the criterion for the validity of an identification procedure has been performance on IQ tests. The review of literature by Gear (1976) provided classic examples of this type of research. Several methods of considering students' eligibility for gifted programs were examined, including group IQ tests, achievement tests, and teacher ratings. These methods were then correlated with an individual IQ test to see which were most efficient and effective in identifying gifted students (i.e., in correlating highly with an individual IQ). Group IQ tests were found to be superior to the other methods.

However, Renzulli and Delcourt (1986) have challenged the use of the IQ test as a criterion for gifted identification procedures. It was their belief that teachers were providing other kinds of important data about the students and that IQ tests simply were not sensitive to this type of data. They further cited the more complex definitions of giftedness that include intellectual aptitude, but go far beyond in describing processes or traits exhibited by gifted individuals. Renzulli and Delcourt suggested that validation studies based on performance of the students were more legitimate in determining the sufficiency of the procedures used to place them in the gifted programs.

Hoge and Cudmore (1986) have also criticized the IQ test-as-criterion validation studies. They stated that "the absence of any empirical data relevant to [success or failure within the gifted program] is a serious matter that should be remedied as soon as possible" (p. 194). Hoge (1988) further stated that some of the most important information that should be gathered to study the validity of an identification process is the performance of the students in the gifted programs. Giving students opportunity for outstanding performance is, he contended, the reason for the use of an identification procedure in the first place.

Performance can, of course, be measured in a variety of ways, including testing, teacher ratings, grades, or product analysis. This study focuses on teacher ratings of performance as one source of evidence about the validity of the identification process used in the pilot study.

### **Attitudes About Gifted Programs**

While the use of students' performance in the program as a validity criterion is recommended, this criterion may be influenced by other factors. One specific concern with this criterion is the influence of the attitudes people may hold about the presence of certain students in a gifted program. The attitudes of teachers, parents, and students can affect actual performance or the perceptions others have about student performance.

Guskin, Peng, and Simon (1992) found that teachers' judgments of students were strongly influenced by stereotypical beliefs about patterns of giftedness. This was especially the case when looking at SES differences, in which children of lower socioeconomic status were seen as less confident than children of middle socioeconomic status. This corroborated earlier research by Thomas (1991) in which it was found that teachers often focused on personal and family observations of bright children from economically disadvantaged populations, and that a substantial percentage (41%) of the observations reflected negative views. If the attitudes reported by Guskin et al. and by Thomas hold true, students from economically disadvantaged populations can often expect to be rated lower on criteria for performance in a program, even though their performance may not markedly differ from that of others in the program.

Other studies have shown that the attitude of parents can affect the students achievement in schools performance. Despite the fact that the identification as gifted of students from economically disadvantaged backgrounds has been problematic to the field of gifted education for some time, research on the possible impact of families has been a relatively recent phenomenon. For example, an important study by Prom-Jackson, Johnson, and Wallace (1987) focused on the way in which parent configuration interrelated with other environmental variables to influence academic performance. Prom-Jackson et al. conducted a retrospective study of a sample of high-achieving young minorities students (i.e., African American, Hispanic, Native American, and Asian American) from low-income backgrounds who had been identified as academically talented during their elementary school years. The results of this study indicated that the development of academically talented students in low-income situations occurred under a variety of home environmental conditions. The educational levels of the parents varied widely. Students came from small, large, and average sized families, and from both single-parent and two-parent households. Interestingly, Prom-Jackson et al. found that children of single-parent households tended to have higher levels of achievement than others in the sample. The importance of an educational supporter role emerged as participants 18 to 33 years of age retrospectively reported perceiving their parents, especially their mothers, as being very supportive of their interests and abilities and helping them to establish a strong sense of self.

However, Prom-Jackson et al. (1987) found that characteristics of the students played a more important role in the achievement of the students than a number of family variables, including parents' educational values in students' performance at school. Similar findings occurred in a longitudinal study of 825 first graders by Pallas, Entwisle, Alexander, and Cadigan (1987). They examined variables of personality, self-image, academic satisfaction and performance, and family background variables (i.e., parents' education, parents' estimate of child's ability, expectations, story reading, and attributions) to ascertain their effects on first year gains of academically talented first graders. The authors concluded that background or family variables had a negligible impact upon those children who did extremely well. They suggested that families may exercise less influence over patterns of exceptional growth than they do over a child's progress in the more typical range.

Another study that investigated parent impact upon individual achievement was conducted by VanTassel-Baska (1989). Her research included case studies of fifteen middle school gifted students from economically disadvantaged backgrounds. Through questionnaires and multiple interviews, key influences on the lives of these students were identified. Institutional influences that emerged from this research included a family value system of education and work, the importance of the extended family in single parent homes, and the school as provider of educational opportunities. VanTassel-Baska also identified important interpersonal influences on these gifted students. These included a parent, usually the mother, as a monitor of student progress; a grandmother as a stabilizing and nurturing influence; and teachers who acknowledged and encouraged ability. The students in these case studies also indicated that their peers played a strong supportive role in their academic achievement. In addition to the interpersonal influences, attitudes internal to the student were also recognized as important. These were motivation to achieve, feelings of self-competence and independence, and mechanisms for coping with school demands (e.g., planning and organization of study). Two negative influences internal to the child were also identified. These included the continuing struggle the students were having in dealing with the divorces of their parents and a tendency to procrastinate.

Many studies have shown that students in gifted programs have generally positive attitudes about their participation (Colangelo & Kelly, 1983; Karnes & Whorton, 1988; Kerr, Colangelo, & Gaeth, 1988). Intuitively, it seems that a student's positive attitude would influence successful performance in the program. Certainly if students are being exposed to exciting educational experiences for the first time, they will likely respond in ways that lead to success in the program. The reverse may also hold true that negative attitudes could result in lack of success.

A major problem, however, in considering the issue of teacher or student attitudes, is the influence these attitudes may have on ratings of success. If teachers are positive about the participation of students from economically disadvantaged backgrounds or limited English proficient populations, they may rate student performance in the program higher than it actually is (known as the halo effect). On the other hand, negative attitudes may result in lower ratings. Likewise, if students have positive attitudes about the program, teachers may be influenced to give higher than deserved ratings to the students. Of course, negative student attitudes could result in lower ratings than deserved. Either of these outcomes could result in misinterpretation of performance in program data. While it is difficult to guard against these occurrences, if data suggest a fair amount of variability in the responses, interpretation can be made with greater confidence.

Data on teacher attitudes were gathered during the pilot study but are not reported here in detail (see Frasier, Hunsaker, Lee, Finley, & Martin, in revision). Generally the teachers believed that students' backgrounds were only a secondary explanation for why

economically disadvantaged students were not being placed in gifted programs. They viewed test bias and their own inability to recognize manifestations of giftedness in culturally divergent students as primary barriers to participation in the programs. Concerns about the presence of target population students in the gifted program and the influence their presence would have on the curriculum were not seen as concerns. Data on student and parent attitudes and their potential for influencing the teacher ratings of performance are reported here.

## Method

In order to explore the validity of the RAP in a preliminary investigation, this study employed a quasi-experimental design with data analyzed through a multiple analysis of variance (MANOVA). However, some responses were subjected to content analysis. Specific analyses for different aspects of the research are described in this section.

## Sample

Participants in the follow-up study of the pilot were drawn from the six school systems in the Southeast that had participated in the pilot study. The sample consisted of 121 students who had been identified as gifted using the SDM and RAP during the pilot study. Students identified during the pilot included representatives of African American, Native American, and White populations, with only small numbers from other ethnic groups as shown in Table 2. All were qualified for free/reduced lunch.

A comparison group of 166 students identified through their districts' traditional identification processes was also selected where the pilot study had been implemented. Comparison students were from the same schools and were served in the same programs as the RAP identified students. Members of the comparison group were predominantly White; none were African American. Further information on ethnic group membership was not made available on comparison group students because school district personnel claimed providing such information would violate the law. However, no one in the comparison group qualified for free or reduced lunch. Thus, students in the comparison group were different from those in the RAP identified group in many ways that gave the comparison students distinct advantages. Frequencies by grade for the comparison group are shown in Table 3.

A major concern in implementing the study was that attrition in the RAP identified group was quite high. Of the 121 originally identified for the gifted programs during the spring of 1991, 109 actually entered the gifted programs in the fall of 1992. Of the 109 students, complete data were available on only 68 students by the end of the 1992-1993 school year. Of the RAP identified students not remaining in the study, 62% moved to other schools not involved in the pilot. An additional 34% were students who remained in the gifted program but who did not complete the data-collection process. School district personnel attributed the failure to gather these data to problems with specific school administrators in one school and to scheduling problems with other individuals at other schools.

Table 2

Frequency by Grade and Ethnicity of Students Identified as Gifted Through the SDM and RAP

Grade	Ethnic Group			
	African American	Native American	White	Other
Kindergarten	6	0	1	4
First	10	0	6	2
Second	10	0	10	1
Third	5	0	3	5
Fourth	14	1	2	5
Fifth	9	1	3	0
Sixth	7	0	0	1
Seventh	3	1	2	2
Eighth	2	0	0	2
Tenth	0	2	0	0
Totals	66	5	27	22

Table 3

Frequencies by Grade of Students Identified Through State Criteria

Grade	Frequency
Kindergarten	2
First	4
Second	4
Third	10
Fourth	29
Fifth	31
Sixth	26
Seventh	23
Eighth	26
Ninth	4
Tenth	3
Eleventh	1
Twelfth	3
Total	166



## **Instrumentation**

Three instruments were used to collect data. One was a rating of program performance completed by gifted program teachers. The others were ratings of students' attitudes toward learning and ratings of parents' attitudes toward their children's experiences in the gifted programs.

### **Scale for Rating Student's Participation in the Local Gifted Education Program**

The *Scale for Rating Student's Participation in the Local Gifted Education Program* (Renzulli & Westberg, 1991) was designed to obtain a gifted education teacher's rating of a student's participation in the gifted program (see Appendix D). The instrument contains items related to the kinds of goals addressed and learning experiences typically conducted in gifted programs. It is a 10-item rating instrument with a five point Likert-scale (1 = very low; 5 = very high). The instrument is internally consistent with an alpha reliability coefficient reported to be .95. No other information on the reliability of the instrument was available.

### **Arlin-Hills Attitude Toward Learning Processes Scales**

The *Arlin-Hills Attitude Toward Learning Processes Scales* (Arlin, 1976) was designed to assess students' attitude toward learning. This self-report instrument asks students to respond to statements concerning how they feel about how they learn in school. For this study, students were asked to respond to the items using their activities in the gifted program as a frame of reference.

The instrument contains 15 items on a four point scale (No, Sometimes, Usually, Yes). Three forms of the instrument are available for different levels; grades 1-3, 4-6, and 7-12. The mean split-half correlation coefficient, corrected by the Spearman-Brown formula for length, is .90 for the three levels. Raw scores were used in this analysis.

### **Parent Questionnaire Regarding Child's Gifted Class Performance**

The *Parent Questionnaire Regarding Child's Gifted Class Performance* (NRC/GT at UGA, 1993) is comprised of 22 items on a 5 point Likert-scale similar to the rating of gifted program performance (see Appendix E). Parents were instructed to select the number on the scale that reflected the degree to which they had experienced the situation presented by the item. Five of the items also included prompts for open responses. In addition, a separate item for any comments the parents felt they needed to make was provided. The items were generated by the researchers to obtain information about parents' perceptions of their child's performance in the gifted program. Areas investigated by the instrument included: (a) the parents' relationship with the school, (b) the parents' perception of their child's adjustment to the gifted program, and (c) the parents' perception of the benefits of the gifted program for their child.

## **Procedures**

Pilot site representatives met in October 1993 in Athens, Georgia to receive training on data collection procedures. Attendees at the training session included gifted program coordinators and teachers of the gifted, as well as a representative from the Georgia State Department of Education. The plan for gathering data for this study was presented. A packet of forms, information about instruments used in the pilot study, and the proposal for the Program Performance Study were given to everyone who attended the meeting.

Following the meeting, the pilot site representatives were sent another packet of materials that included instructions for data collection and permission forms to be collected from the parents of the students participating in this study. Because of the types of information being gathered, it was necessary that the students be in the gifted class for a significant period of time prior to the administration of the instruments. Further, site representatives were asked to conduct the data analysis in their local schools in order to protect the confidentiality of their students. Thus, all completed protocols were sent to the district office where they were collated and then forwarded to the NRC/GT.

The first round of data collection using all three instruments was done at the beginning of the second semester of school. The student questionnaire was completed by all participating students at the same time, with administration proctored by the teacher. Teacher surveys were completed as the teachers' schedules permitted. The parent questionnaire was sent home with all participating students in the gifted program. Parents completed this questionnaire as their schedules permitted and returned them to the teachers. According to the site representatives, they experienced difficulty with the return of the parent questionnaire from both the RAP identified group and the traditionally identified group.

Data gathering of posttest results was conducted in the same manner at the end of the second semester. Again, site representatives reported that they experienced difficulty in gathering data from parents, but they also had similar difficulty in obtaining data from teachers and students. Based on discussions with their teachers, site representatives reported that the two data collection rounds had occurred too close together. This resulted in many being unwilling to provide data for the posttest.

Upon receipt of the completed protocols, data entry began. As the data were entered, respondent identifying information was destroyed.

### Analyses

Data from each of the three instruments were subjected to separate analyses. Multiple analyses of variance (MANOVAs) with a group by item design were conducted on scores from the *Scale for Rating Student's Participation in the Local Gifted Education Program* (Renzulli & Westberg, 1991), the *Arlin-Hills Attitude Survey Toward School Learning Processes* (Arlin, 1976), and the *Parent Questionnaire Regarding Child's Gifted Class Performance* (NRC/GT at UGA, 1993). Cases with missing data were deleted from the analysis. Where significant F-ratios were achieved with alpha set at .05, post hoc assessment of dependent variables was done through interpretation of a loading matrix. This procedure is suggested by Tabachnick and Fidell (1983) for dependent variables that might be correlated. Group descriptive statistics were then inspected for specific items with high loadings (using a .3 loading as the cutoff, also suggested by Tabachnick and Fidell) to aid interpretation of group differences.

Because the numbers of students in the two groups were so unequal (166 traditionally identified students to 68 RAP identified students), possible violation of the assumption of homogeneity of variance was indicated. A check of sample sizes and variances in each cell was conducted according to procedures recommended by Tabachnick and Fidell (1983). They stated that, while sample sizes should preferably be equal, in no case should the ratio between the largest and smallest sample size be greater than 4:1. In this case, the greatest ratio was 2.369:1. Tabachnick and Fidell further suggested that the ratio of the variances should be no greater than 20:1. Again, in the case of this study, the greatest ratio was 1.768:1. According to Tabachnick and Fidell, when data are within the

limits suggested, a formal test of homogeneity of variance is unnecessary, given the robustness of the statistical procedure to be used against violation of the assumption.

In addition, given the high mortality of the subjects in the study, an analysis of midyear assessment scores was conducted for those who completed only a midyear assessment and those who completed both a midyear assessment and a posttest to determine if there were significant differences between the group that completed only a midyear assessment and the group that completed both a midyear assessment and a posttest. The MANOVA on the items of each of the instruments indicated that there was a significant difference on the midyear assessment scores of the student instrument (Arlin-Hills) between the two groups (Wilks Lambda=.7677,  $F(15, 162)=3.2681$ ,  $p=.0001$ ). According to post hoc analysis, one item (dealing with the amount of homework) contributed to the difference (Canonical Structure Loading=.7266). There were no significant differences on the parent instrument (Wilks Lambda=.8395,  $F(21, 140)=1.2741$ ,  $p=.2026$ ) and the teacher rating scale (Wilks Lambda=.9320,  $F(10, 186)=1.3577$ ,  $p=.2030$ ). Because of the difference between the two groups on the student instrument, it was determined to conduct only analyses on the midyear assessment, which included both groups of students. As a result, the initially intended repeated measures design was abandoned.

Content analyses were conducted on the open response parent questionnaire items. For five items, this involved categorizing each response as positive, negative, or neutral. For one item, concerning stresses the students had experienced in the program, responses were categorized by theme. Categorizations were done by two members of the NRC/GT staff. Simple frequencies were then tabulated for these results.

## Results

### Scale for Rating Student's Participation in the Local Gifted Education Program

A MANOVA using group as the independent variable and each individual item as the dependent variables was conducted on the *Scale for Rating Student's Participation in the Gifted Program* (Renzulli & Westberg, 1991). The results of this analysis were significant (Wilks Lambda=.8642,  $F(10, 186)=2.9236$ ,  $p=.0020$ ). In Table 4 the loading matrix for post hoc evaluation of dependent variables is presented.

The structure of this linear combination of variables indicates that differences between the RAP identified group and the traditionally identified group were primarily the result of Interaction with Others, and secondarily of Use of Critical Thinking. Group means and standard deviations for these items, shown in Table 5, indicate that on Interaction with Others, RAP identified students ( $\bar{X}=4.38$ ,  $SD=.85$ ) were rated more highly than traditionally identified students ( $\bar{X}=4.05$ ,  $SD=.96$ ). On the secondary variable of Use of Critical Thinking, traditionally identified students ( $\bar{X}=3.90$ ,  $SD=.94$ ) received higher ratings than RAP identified students ( $\bar{X}=3.63$ ,  $SD=.90$ ). A rating of 4 on this instrument indicates a student displays the behavior to a high degree.



Table 4

Structure Loadings for Items on the Scale for Rating *Student's Participation in the Local Gifted Education Program*

Item	Loading
Enthusiasm and Involvement	-.2722
Use of Creative Thinking	-.0985
Contribution to Discussion	.2036
Use of Critical Thinking	.3330
Quality of Products	.2098
Pursuit of Challenge	.0380
Communication Skills	.0896
Interaction with Others	-.4429
Use of Research Skills	.2032
Overall Success	.0903

Table 5

Descriptive Statistics for Items on the Scale for Rating *Student's Participation in the Local Gifted Program*

Item	RAP	Traditional
	$\bar{X}$ (SD)	$\bar{X}$ (SD)
Enthusiasm and Involvement	4.30 ( .80)	4.06 ( .87)
Use of Creative Thinking	4.06 ( .83)	4.02 ( .94)
Contribution to Discussion	3.96 ( .93)	4.12 ( .95)
Use of Critical Thinking	3.63 ( .90)	3.90 ( .94)
Quality of Products	3.77 ( .78)	3.95 ( .94)
Pursuit of Challenge	3.93 ( .76)	3.94 ( .94)
Communication Skills	3.96 ( .75)	4.05 ( .85)
Interaction with Others	4.38 ( .85)	4.05 ( .96)
Use of Research Skills	3.66 (1.13)	4.01 ( .77)
Overall Success	4.06 ( .67)	4.12 ( .77)

### Arlin-Hills Attitude Toward Learning Processes

The second analysis consisted of a MANOVA with group as the independent variable and responses to the 15 items of the *Arlin-Hills Attitude Toward Learning Processes* (Arlin, 1976) as the dependent variables. Results indicated a statistically significant group effect (Wilks Lambda=.8530,  $F(15,162)=1.8613$ ,  $p=.0307$ ). The structure loadings for post hoc evaluation of dependent variables is presented in Table 6.

The structure loadings indicate that the significant difference between groups is defined primarily by the item Help Teacher Plan and the item Learn Outside the Classroom. Secondary definition is provided by the item Sit with Friends and the item Work on Special Things. An analysis of means and standard deviations provides an additional aid in interpreting the differences between the groups. Descriptive statistics are shown in Table 7.

The primary variable for interpreting the differences between groups, Help Teacher Plan, was given higher ratings by RAP identified students ( $\bar{X}=2.25$ ,  $SD=1.03$ ) than by traditionally identified students ( $\bar{X}=1.82$ ,  $SD=.90$ ). The other primary defining variable, Learn Outside the Classroom, was also rated more highly by RAP identified students ( $\bar{X}=2.28$ ,  $SD=1.11$ ) than by traditionally identified students ( $\bar{X}=1.96$ ,  $SD=1.09$ ). For the variables that define the linear combination secondarily RAP identified students again gave higher ratings. On the item Sit with Friends, the mean for RAP identified students was 2.82 ( $SD=1.16$ ) compared to a mean of 2.51 ( $SD=1.17$ ) for traditionally identified students. On the item Work on Special Things, the mean for RAP identified students was 2.52 ( $SD=1.08$ ), with the mean for traditionally identified students at 2.22 ( $SD=1.06$ ). On this instrument, a rating of 2 indicates "sometimes," while a rating of 3 indicates "usually."

Table 6

#### Structure Loadings for Items on the *Arlin-Hills Attitude Toward Learning Processes*

Item	Loading
Time to Help Each Other	.0398
Spend Time Sitting	-.1350
Work on Same Thing	-.2002
Chances to Choose	.1382
Permission from Teacher	-.1003
Learn Outside the Class	.4266
Help Teacher Plan	.6467
Teacher Talking	-.0743
Walk Around Classroom	-.0820
Sit with Friends	.3623
Read Same Books	.0288
Too Much Homework	.1876
Work with Friends	.0418
Work on Special Things	.3313
Work Fast or Slow	.0310

Table 7

Descriptive Statistics for Items on the Arlin-Hills Attitude Toward Learning Processes

Item	RAP	Traditional
	$\bar{X}$ (SD)	$\bar{X}$ (SD)
Time to Help Each Other	2.76 ( .92)	2.78 ( .88)
Spend Time Sitting	2.83 (1.09)	2.92 (1.07)
Work on Same Thing	2.67 (1.02)	2.79 (1.04)
Chances to Choose	2.32 ( .99)	2.23 (1.09)
Permission from Teacher	2.29 (1.07)	2.36 (1.01)
Learn Outside the Class	2.28 (1.11)	1.96 (1.09)
Help Teacher Plan	2.25 (1.03)	1.82 ( .90)
Teacher Talking	2.92 (1.07)	2.90 ( .99)
Walk Around Classroom	2.53 (1.17)	2.65 (1.10)
Sit with Friends	2.82 (1.16)	2.51 (1.17)
Read Same Books	3.09 ( .99)	3.07 (1.05)
Too Much Homework	3.24 ( .92)	3.05 (1.12)
Work with Friends	2.77 ( .98)	2.75 (1.01)
Work on Special Things	2.52 (1.08)	2.22 (1.06)
Work Fast or Slow	2.71 (1.08)	2.69 (1.04)

**Parent Questionnaire Regarding Child's Gifted Class Performance****Quantitative Analysis**

The MANOVA for the parent attitude questionnaire, with group the independent variable and separate items as dependent variables, did not yield a significant difference for a group effect (Wilks Lambda=.7973,  $F(22, 139)=1.6062$ ,  $p=.0530$ ). As a result, no post hoc analyses were done on the parental responses. While there were no significant differences, it is interesting to note the level of the ratings given by the parents regarding their children's participation in the gifted programs. Descriptive statistics for each item on the parent questionnaire are provided in Table 8. In general, parents of RAP identified children and traditionally identified children gave ratings of about 3 or 4 to most items. A rating of 3 was labeled average on the questionnaire; a rating of 4 was labeled high. A few items (i.e., Problems with Friends, Concerns about Difficulty, and Stresses from Gifted Class) received ratings of about 2, which was labeled low on the questionnaire.

Table 8

Descriptive Statistics for Items on the Parent Questionnaire Regarding Child's Gifted Class Performance

Item	RAP	Traditional
	$\bar{X}$ (SD)	$\bar{X}$ (SD)
Enough Information from School	3.08 ( .99)	3.29 (1.08)
Discussion of Child's Progress	3.44 (1.13)	3.64 (1.09)
Teacher/Parent Communication	2.80 (1.23)	3.21 (1.15)
Child Talks about Experiences	3.95 (1.02)	3.87 (1.00)
Child Expresses Enjoyment	4.10 ( .95)	4.24 ( .74)
Challenging Work Provided	3.95 ( .91)	4.05 ( .78)
Child Handles Challenges	4.07 ( .80)	4.24 ( .64)
Problems with Friends	1.47 ( .86)	1.64 (1.02)
Child Feels Comfortable	4.30 ( .72)	4.41 ( .75)
Child Gets Along with Others	4.20 ( .73)	4.33 ( .66)
Changes Toward Learning	2.97 (1.26)	3.35 (1.18)
Changes in Abilities	3.12 (1.17)	3.39 (1.02)
Increased Workload for Child	2.90 (1.13)	2.98 (1.08)
Child Motivated to Do Well	4.17 ( .83)	4.27 ( .82)
Concerns About Difficulty	2.35 (1.20)	1.87 (1.01)
Performance Important to Child	4.32 ( .63)	4.40 ( .72)
Gifted Class More Helpful	3.76 (1.07)	3.96 (1.03)
Help Achieve Future Goals	4.38 ( .76)	4.34 ( .73)
Help with Child's Organization	3.49 ( .94)	3.63 (1.13)
Stresses from Gifted Class	1.61 (1.03)	1.97 (1.09)
Teacher Contributes Positively	4.28 ( .77)	4.34 ( .80)
Others Students Contribute	3.66 ( .83)	3.69 ( .86)

**Content Analysis**

Six items on the parent questionnaire called for open-ended responses from the parents. Some of these responses were consistent with the general findings of the quantitative analysis; that is, there were few differences in responses between the parents of the two groups. Further, on two items responses were generally positive. On one item responses were primarily neutral, but there was a tendency toward positive comments. There were some differences between the identification groups in the quality of responses on some items. However, it should be recalled that on the statistical analysis of these same items, no significant differences were found. Further, the attitude of parents on the open-ended questions was not entirely positive. On some items, parents did provide some negative responses. Summaries of the analyses of parents' responses to each of the open-ended items on the parent questionnaire are provided in this section.

Parents were asked if their children talked about their experiences in the gifted classes. As shown in Table 9, of the 135 parents who responded, 80 gave answers that

were classified as neutral, indicating that their children talk mostly about specific projects or assignments. However, 50 responses were classified as positive, indicating the general excitement children had for the gifted program. Only five responses were categorized as negative. When looking at the pattern of responses within each identification type, the ratio between negative, neutral, and positive responses is similar, with percentages for positive responses rounding to 40% in both cases, and percentages for neutral responses rounding to 60%. Negative responses were nearly nonexistent.

As seen in the data in Table 10, ratios between positive and negative numbers were quite different on the item that asked about problems students had encountered with friends since being in the gifted class when compared to the previous item. In all, 24 parents stated that their children had experienced problems, while 37 parents made statements indicating that their children had not experienced problems. While there were no neutral responses, many parents simply made no comment at all on this item. The pattern of responses within identification types is also very different. Parents of traditionally identified students were evenly split, indicating that about half of their children had problems with friends and that the other half had not. On the other hand, parents of project identified students were not likely to indicate that their children had any problems with friends resulting from placement in the program. It should be recalled, however, that statistical analysis on this item showed no significant differences in the means of the ratings given by parents to this item.

Table 9

Content Analysis of Children's Talk to Parents About Gifted Class Experiences

	RAP	Traditional
Category	N (%)	N (%)
Positive	15 (39.5)	35 (36.1)
Example	How much he enjoys being in the gifted class. Whatever he does on Monday, he is ready to tell me when I come in the door from work.	She is very excited and really likes the class because she learns things that she wouldn't in a regular class.
Neutral	21 (55.3)	59 (60.8)
Example	What they have done, what they will do, projects they are working on.	The projects they have to do or have done.
Negative	2 ( 5.3)	3 ( 3.1)
Example	At first, she was hesitant to go because she was the youngest in the class.	Boring, no fun stuff, nothing to make you think.

Table 10

Content Analysis of Children's Reports to Parents About Problems Encountered With Friends

	RAP	Traditional
Category	N (%)	N (%)
Yes	2 (11.8)	22 (50.0)
Example	Jealousy.	I have problems with [a specific student]. He's always making cracks and jokes about me, but most of the time when he says something to me, I say something back. Other times, I say thanks.
No	15 (88.2)	22 (50.0)
Example	He has no problems.	[My child] gets along with anyone.

Another item asked parents what changes they had noticed in their children's attitudes toward learning since their children had entered the gifted program. The summary of the analysis of parents' comments to this request are in Table 11. The pattern of positive, neutral, and negative comments shows that parents were generally positive in their remarks, with 71 parents claiming they had noticed positive changes. Only 12 parents gave neutral responses indicating their children were still the same. Seven of the parents indicated that negative changes had occurred. The pattern of responses within identification groups was also similar, with nearly 80% of both groups noting positive changes. However, a higher proportion of parents from the RAP identified group gave neutral responses, compared to a nearly even split between neutral and negative changes noted by the parents of traditionally identified students.



Table 11

Content Analysis of Children's Reports to Parents About Changes in Feelings Toward Learning

	RAP	Traditional
Category	N (%)	N (%)
Positive	18 (78.3)	53 (79.1)
Example	She's got a lot of self-pride.	It makes her want to learn more.
Neutral	4 (17.4)	8 (11.9)
Example	Our son's study habits and behaviors are basically the same.	She is still the same person. No uppity or superior attitude.
Negative	1 ( 4.3)	6 ( 9.0)
Example	Getting bored in his other work.	Sometimes she asks if she can get out of the class.

In responding to the item about difficulties with the work encountered in gifted class, parents indicated that their children were facing some problems, as shown in Table 12. A total of 33.5 responses were classified as negative. A large group of those who responded (22 parents) provided comments that were classified as neutral. Relatively few parents (4.5 in all) provided positive comments. The ratios of responses within identification groups were also somewhat different, with parents of traditionally identified students having a greater proportion (58.5%) of negative responses. This contrast appeared despite the fact that the statistical analysis showed no significant difference on the means of the ratings parents gave this item. Parents of RAP identified students were evenly split between a neutral response and a negative response (46.2% of each), indicating that their children faced either no problems or had some problems, respectively. Among the parents of traditionally identified students, 34% of the parents provided a neutral response. For responses categorized as positive, the parents of RAP identified students provided only 1 such comment (7.7%), while 7.4% of the parents of traditionally identified children gave such comments. As can be seen from the examples in the table, the most typical concern encountered by both groups, and one expressed by nearly everyone who made a negative comment, was lack of clarity of expectations.

Table 12

Content Analysis of Children's Reports to Parents About Difficulty of Work

Category	RAP	Traditional
	N (%)	N (%)
Positive	1 ( 7.7)	3.5 ( 7.4)
Example	I am confident that she does not feel [difficulty] at all.	She loves the challenge and her teacher.
Neutral	6 (46.2)	16 (34.0)
Example	None that I've heard.	No complaints about difficulty.
Negative	6 (46.2)	27.5 (58.5)
Example	A lack of understanding what is expected of her; being above her skills.	Sometimes he doesn't know what to do. (He's a little apprehensive or shy about asking questions.)

Note. One response was classified as both negative and positive.

An examination of Table 13 reveals responses to the item concerning the stresses students dealt with because of their participation in the gifted class. Many more parents of traditionally identified children were able to articulate the stresses their children experienced, with homework issues being the primary stressor. The main concern here was the amount of homework given. Additional categories of stress with multiple responses included peer pressure and student doubts about their abilities. Fifteen parents provided responses that could not be grouped, while 19 parents indicated they had no comment. Even though the categorization of the responses indicates some differences in the number of responses given in each category, the statistical analysis of ratings on this item showed no significant difference between the means of the groups.

Table 13

Content Analysis of Children's Reports to Parents About Stresses Due to Gifted Class

Category	RAP	Traditional
	N	N
Homework	2	19
Example	I have had to request that the principal coordinate class projects assigned by individual gifted teachers.	Having homework from her classroom in addition to homework from [the gifted program] at the same time.
Peer Pressure	1	4
Example	Pressure from her peers.	Being different and getting teased and made fun of.
Student Doubts about Ability	1	5
Example	Not being able to do some of the work, thinking she is inferior to standards set by herself and her parents.	When she doesn't do very well in some areas, but feels or thinks she should have done better, this brings on stress.
Other	2	13
No Comment	7	12

The final item asked parents for any additional feedback they had to give about their children's participation in the gifted program. Sixty-four parents responded to this item (see Table 14). The most prevalent category of response included positive statements about the gifted program and its teachers. This was followed by requests for more feedback about the program from the teachers. A few parents had criticisms of the program. Thirteen additional responses could not be grouped into any shared category but dealt with a variety of topics, while 2 parents indicated they had no other comments. This item did not include a quantitative rating.

Table 14

Content Analysis of Additional Feedback From the Parent Questionnaire

Category	RAP	Traditional
	N	N
Positive Program	11	28
Example	I am really proud of him and thanks to all the gifted teachers participating in the program.	We are so glad there is something available for higher learning.
More Feedback Needed	6	6
Example	I would like to know more about what my child does in this class.	I would like more feedback on how [my child] is doing.
Negative Program	1	6
Example	He does not go to the gifted class on lots of days that it is supposed to be held because they do not have it.	My child seems slightly displeased about being in certain groups while working on certain projects.
Other	2	11
None	1	1

## Discussion

The Program Performance Study dealt with three major research questions. These were:

- (1) How do RAP identified students compare to traditionally identified students on teacher ratings of gifted program performance?
- (2) How do RAP identified students compare to traditionally identified students on attitudes toward school?
- (3) What are the attitudes of parents of RAP identified students toward the gifted program experience of their children, and how do these attitudes compare with those of parents of traditionally identified students?

Each of these questions will be discussed in turn.

### Comparisons of Gifted Program Performance

Based on teacher ratings of performance in the gifted program, students identified through the RAP performed just as well as traditionally identified students in most areas. Average ratings for both groups indicated that teachers believed students in the program, regardless of type of identification, were performing at high levels. However, RAP identified students' ratings in interaction with others significantly exceeded those for traditionally identified students. Traditionally identified students were rated significantly higher in use of critical thinking.

One challenge to these findings might be that RAP identified students were rated more highly by their teachers because of the hopes these teachers held for the students' success. However, the size of the standard deviations for both groups indicated a fair amount of variability in rating the students' performances. This would show an attempt on the part of the teachers to be professional and fair in their ratings. Further, while homogeneity of variance was not formally assessed, means and variance ratios between the cells of the MANOVA were within acceptable standards (Tabachnick & Fidell, 1983).

The difference in ratings on the use of critical thinking may reveal a need to alter curriculum in the program to include some critical thinking skills development so that RAP identified students become proficient at applying these skills at the same level of students who were already in a program based on traditional criteria. However, the lack of differences on other process skills, knowledge, and quality of products would not indicate a need to lower curricular standards, a concern many have when alternative identification procedures are introduced.

### Comparisons of Student Attitudes

RAP identified students were significantly more positive than traditionally identified students on their ratings of a number of variables on their attitudes toward learning. Variables contributing to the statistically significant difference between the two groups included opportunities to help the teacher plan learning experiences, to Learn Outside the Classroom, to Work with Friends, and to Work on Special Things.

The finding related to opportunities for learning outside the classroom seems important given the low socioeconomic status of the students placed in gifted programs through the RAP. As stated by Baldwin (1978), it may be that, compared to their fellow middle class students, economically disadvantaged students such as those identified

through the RAP would have fewer extracurricular learning experiences (e.g., trips to museums, concert halls, zoos, and camps) provided by their families. Where these experiences have been provided by the schools, the students are likely to be appreciative and, thus, give higher ratings to this item.

It seems particularly important to note the differences indicated by teacher ratings of student interaction with other students and in student ratings of opportunities to work with friends. One stereotypic view of low SES minority culture is that support is not provided within the culture for academic achievement, that the culture views academic achievement as a sort of treason, as capitulating to majority cultural values (Fordham & Ogbu, 1986; Gibson, 1982). Yet, students identified through the RAP seem to have found a base of support among their friends within an academically challenging program. This interpretation of the data is also supported by the general lack of affirmative responses to the open-ended item about problems with friends on the parent questionnaire.

### **Comparisons of Parent Attitudes**

The parents of both traditionally and RAP identified students gave high ratings to the gifted programs, and each group held similar concerns. Responses to the open-ended items also may indicate that parents of both groups are aware of some of the problems faced by their children in the gifted programs. This awareness could form a basis for the emotional support for their children's work in gifted programs that is so important for children to succeed academically. It also challenges the myths about the interest level parents from low SES minority communities have in their children's education (Baratz & Baratz, 1970; Whiteman, Brown, & Deutsch, 1965). The parents of both groups of children responded in ways that indicate interest and concern.

### **Implications and Conclusions**

One purpose of this investigation of the performances of students in gifted programs was to provide some data on the validity of a multiple assessment approach that relies heavily on professional judgment for placement of students in the program. Based on the teachers' ratings of performance of RAP identified students, when compared to ratings of traditionally identified students, RAP appeared to be a valid approach. While additional investigations are needed to examine the creative productivity of these students, as suggested by Renzulli and Delcourt (1986), as they continued their placements in gifted programs, the students demonstrated to their gifted program teachers' satisfaction that they were capable of participating in gifted programs with enthusiasm and skill.

Further, the high teacher ratings indicated that the gifted program teachers did not resent the presence of students identified through alternative means, or, if they did hold resentment for the students, they were able to provide positive assessments of the students' performance. In other words, their ratings did not fall prey to the biases against economically disadvantaged students the research has suggested they may have (Guskin et al., 1992; Thomas, 1991). Further, the parents of economically disadvantaged students were not disinterested in their children's education, but were appreciative and supportive of the opportunities their children were receiving. The students also had generally positive attitudes about the gifted programs and in particular found opportunities to interact and work with friends. This combination of high teacher ratings of performance and positive parent and student attitudes should combine for successful future performance by these students. Of course, data were collected for this study after only one semester of



involvement in the gifted program. Further research is needed to determine the longevity of these positive attitudes.

Even with the positive results reported, one concern in this study was the high attrition rate of students placed through the RAP. Many of the students, who were placed, but did not continue in the study were lost due to transfers to other schools. This may suggest the need to consider the effects of transience on the identification of economically disadvantaged children, or it could merely be an artifact of the pilot study in which only certain schools within a district participated in the program.

However, these data begin to establish a foundation of support for the notion of using multiple criteria coupled with professional decision-making as a basis for identification of students as gifted. Under certain conditions, gifted students can successfully be found in economically disadvantaged populations without relying on critical judgments such as cut-off scores or weighted matrices. These conditions include a good understanding of core traits, aptitudes, and behaviors (TABs) associated with giftedness; careful observation of culturally-influenced manifestations of those TABs; multiple assessments of children that provide a comprehensive profile of their abilities; decision-making based on a holistic interpretation of a child's profile with a focus on his or her particular strengths; treatment of teachers as professionals by providing training that permits them to meet the previous conditions, and acknowledgment of teachers' expertise in the decision-making process.

## References

- Arlin, M. (1976). *Attitude toward learning processes*. Chesterfield, MO: Psychologists & Educators.
- Baldwin, A. Y. (1978). Curriculum and methods: What is the difference? In A. Baldwin, G. Gear, & L. Lucito (Eds.), *Educational planning for the gifted: Overcoming cultural, geographic, and socioeconomic barriers* (pp. 37-49). Reston, VA: Council for Exceptional Children.
- Baratz, S. S., & Baratz, J. C. (1970). Early childhood intervention: The social science base of institutional racism. *Harvard Educational Review*, 40, 29-50.
- Colangelo, N., & Kelly, K. R. (1983). A study of student, parent, and teacher attitudes toward gifted programs and gifted students. *Gifted Child Quarterly*, 27, 107-110.
- Fordham, S., & Ogbu, J. U. (1986). Black students' school success: Coping with the "burden of 'acting White.'" *Urban Review*, 18, 176-206.
- Frasier, M. M. (1991). Response to Kitano: The sharing of giftedness between culturally diverse and non-diverse gifted students. *Journal for the Education of the Gifted*, 15, 20-30.
- Frasier, M. M., Hunsker, S. L., Lee, J., Finley, V., & Martin, D. (in revision). Educators' perception of barriers to the identification of gifted minority and economically disadvantaged children.
- Frasier, M. M., & Passow, A. H. (1994). *Toward a new paradigm for identifying talent potential: Executive summary* (Research Monograph 94112). Storrs, CT: University of Connecticut, The National Research Center on the Gifted and Talented.
- Gear, G. H. (1976). Accuracy of teacher judgement in identifying intellectually gifted children. *Gifted Child Quarterly*, 20, 478-490.
- Gibson, M. A. (1982). Reputation and respectability: How competing cultural systems affect students' performance in school. *Anthropology and Education Quarterly*, 13, 3-27.
- Guskin, S. L., Peng, C-Y. J., & Simon, M. (1992). Do teachers react to "multiple intelligences"? Effects of teachers' stereotypes on judgments and expectancies for students with diverse patterns of giftedness/talent. *Gifted Child Quarterly*, 36, 32-37.
- Hoge, R. D. (1988). Issues in the definition and measurement of the giftedness construct. *Educational Researcher*, 17(7), 12-16, 22.
- Hoge, R. D., & Cudmore, L. (1986). The use of teacher-judgment measures in the identification of gifted pupils. *Teaching and Teacher Education*, 2, 181-196.
- Karnes, F. A., & Whorton, J. E. (1988). Attitudes of intellectually gifted youth toward school. *Roeper Review*, 3, 173-175.
- Kerr, B., Colangelo, N., & Gaeth, J. (1988). Gifted adolescents' attitudes toward their giftedness. *Gifted Child Quarterly*, 32, 245-247.

National Research Center on the Gifted and Talented. (1992). *Parent questionnaire regarding child's gifted class performance*. Unpublished document. Athens, GA: Author.

Office of Educational Research and Improvement. (1993). *National excellence: A case for developing America's talent*. Washington, DC: U.S. Department of Education.

Pallas, A. M., Entwisle, D. R., Alexander, K. L., & Cadigan, D. (1987). Children who do exceptionally well in first grade. *Sociology of Education*, 60, 257-271.

Prom-Jackson, S., Johnson, S. T., & Wallace, M. B. (1987). Home environment, talented minority youth, and school achievement. *Journal of Negro Education*, 56(1), 111-121.

Renzulli, J. S., & Delcourt, M. A. B. (1986). The legacy and logic of research on the identification of gifted persons. *Gifted Child Quarterly*, 30, 20-23.

Renzulli, J. S., & Westberg, K. L. (1991). *Scale for rating students' participation in the local gifted education program*. Unpublished document. Storrs, CT: University of Connecticut.

Tabachnick, B. G., & Fidell, L. S. (1983). *Using multivariate statistics*. New York: Harper & Row.

Thomas, L. S. (1991). *A survey of the attributes of bright students from economically disadvantaged families and areas: How teachers describe these students*. Unpublished master's thesis. University of Georgia, Athens.

VanTassel-Baska, J. L. (1989). The role of the family in the success of disadvantaged gifted learners. *Journal for the Education of the Gifted*, 13, 22-36.

Whiteman, M., Brown, B. R., & Deutsch, M. (1965). *Some effects of social class and race on children's language and intellectual abilities*. Washington, DC: U.S. Department of Health, Education, and Welfare, Office of Education.

**Appendix A**  
**Traits, Aptitudes, and Behaviors' Descriptors**

TRAITS, APTITUDES AND BEHAVIORS	DEFINITION
Motivation	<ul style="list-style-type: none"> <li>• Evidence of desire to learn</li> <li>• Forces that initiate, direct, and sustain individual or group behavior in order to satisfy a need or attain a goal</li> </ul>
Interests	<ul style="list-style-type: none"> <li>• Intense (sometimes unusual) interests</li> <li>• Activities, avocations, objects, etc., that have special worth or significance and are given special attention</li> </ul>
Communication Skills	<ul style="list-style-type: none"> <li>• Highly expressive and effective use of words, numbers, symbols</li> <li>• Transmission and reception of signals or meanings through a system of symbols (codes, gestures, language, numbers)</li> </ul>
Problem Solving Ability	<ul style="list-style-type: none"> <li>• Effective, often inventive strategies for recognizing and solving problems</li> <li>• Process of determining a correct sequence of alternatives leading to a desired goal or to successful completion or performance of a task</li> </ul>
Memory	<ul style="list-style-type: none"> <li>• Large storehouse of information on school or non-school topics</li> <li>• Exceptional ability to retain and retrieve information</li> </ul>
Inquiry	<ul style="list-style-type: none"> <li>• Questions, experiments, explores</li> <li>• Method or process of seeking knowledge, understanding of information</li> </ul>
Insight	<ul style="list-style-type: none"> <li>• Quickly grasps new concepts and makes connections; senses deeper meanings</li> <li>• Sudden discovery of the correct solution following incorrect attempts based primarily on trial and error</li> </ul>
Reasoning	<ul style="list-style-type: none"> <li>• Logical approaches to figuring out solutions</li> <li>• Highly conscious, directed, controlled, active, intentional, forward-looking, goal-oriented thought</li> </ul>
Imagination/Creativity	<ul style="list-style-type: none"> <li>• Produces many ideas; highly original</li> <li>• Process of forming mental images of objects, qualities, situations or relationships which aren't immediately apparent to the senses; problem-solving through non-traditional patterns of thinking</li> </ul>
Humor	<ul style="list-style-type: none"> <li>• Conveys and picks up on humor</li> <li>• Ability to synthesize key ideas or problems in complex situations in a humorous way; exceptional sense of timing in words and gestures</li> </ul>

**Appendix B**  
**Suggested Pilot Study Instrumentation**



The following instruments were suggested by the NRC/GT for use in creating the profiles and advocacy information for the second and third pages of the *Frasier Talent Assessment Profile (F-TAP)* (see Appendix C) during the pilot study. Pilot sites were permitted to substitute similar tests as local circumstances dictated (e.g., availability of scores, familiarity with instruments).

Kuhlmann, F., & Anderson, R. (1982). *Kuhlman-Anderson tests* (8th ed.). Bensenville, IL: Scholastic Testing Service.

National Research Center on the Gifted and Talent (Ed.). (1991). *Children's language usage evaluation scale*. Athens, GA: Author.

Renzulli, J. S., Smith, L. H., White, A. J., Callahan, C. M., & Hartman, R. K. (1976). *Scales for rating the behavioral characteristics of superior students*. Mansfield Center, CT: Creative Learning Press.

Torrance, E. P. (1990). *Torrance tests of creative thinking*. Bensenville, IL: Scholastic Testing Service.

Wick, J. W., Beggs, D. L., & Mouw, J. T. (1989). *Developing cognitive abilities test*. Chicago: American Testronics.

Wick, J. W., Dolan, L. J., & Enos, M. M. (1989). *School attitude measure*. Chicago: American Testronics.

Wick, J. W., Fraenkel, J. R., Smith, J. K., & Wallen, N. E. (1989). *National achievement test*. Chicago: American Testronics.

Yeatts, P., & Morrison, M. (n.d.) *Yeatts-Morrison self concept appraisal*. Athens, GA: Author.

**Appendix C**  
**Frasier Talent Assessment Profile (F-TAP)**

**F** RASIER  
**T** ALENT  
**A** SSESSMENT  
**P** ROFILE

**RESEARCH EDITION**

STUDENT INFORMATION	
Name: _____	Student Code: _____
Birthdate: _____	Gender: _____ Race/Ethnicity: _____
Grade: _____	School Name/Number: _____
Parent/Guardian: _____	
Referred by: _____	
Relationship to Student: _____	

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**COMMITTEE DECISIONS**

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**ASSESSMENT**

Student Code: \_\_\_\_\_

**ADVOCACY INFORMATION**

<b>Language Proficiency</b>	<b>Self-Perception of Ability</b>
<b>Additional Information Aptitude/Achievement</b>	<b>Other</b>

**REFERRAL**

<b>TABs Summary</b>
<input type="checkbox"/> Communication <input type="checkbox"/> Motivation <input type="checkbox"/> Humor <input type="checkbox"/> Inquiry <input type="checkbox"/> Insight <input type="checkbox"/> Interests <input type="checkbox"/> Problem Solving <input type="checkbox"/> Memory <input type="checkbox"/> Reasoning <input type="checkbox"/> Imagination/Creativity

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Student Code: \_\_\_\_\_

**EDUCATIONAL PLAN**

<b>Programming Options</b>	<b>Curricula Needs</b>
<b>Counseling Needs</b>	<b>Goals/Outcome Evaluations</b>

**THE  
CHILD**

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## **Appendix D**

### **Scale for Rating Student's Participation in the Local Gifted Education Program**

# **SCALE FOR RATING STUDENT'S PARTICIPATION IN THE LOCAL GIFTED EDUCATION PROGRAM**

Developed by J. S. Renzulli & K. L. Westberg  
The University of Connecticut, 1991

**DIRECTIONS:** Please complete the following rating scale on each of your students. The form below contains items that are designed to obtain the gifted education teacher's rating of the student's participation in the gifted education program during the school year.

**INSTRUCTIONS:** Please read each item below and circle the number that corresponds with the degree to which you have observed each behavior. Note: each item should be read with the beginning phase, This year, the student. . . The words that correspond to the six scale values are:

Not Applicable	Very Low Degree	Low Degree	Moderate Degree	High Degree	Very High Degree
0	1	2	3	4	5

**Student's Name** \_\_\_\_\_

*(please, fill in)*

**Grade Level** \_\_\_\_\_

	<b>DEGREE</b>					
	Not Applicable	Very Low	Low	Moderate	High	Very High
<b>This year, the student. . .</b>						
1. Demonstrated enthusiasm and involvement in gifted education program activities.	0	1	2	3	4	5
2. Demonstrated effective use of creative thinking and creative problem solving processes.	0	1	2	3	4	5
3. Contributed ideas and information to group discussions.	0	1	2	3	4	5
4. Demonstrated effective use of critical thinking skills	0	1	2	3	4	5
5. Created quality products.	0	1	2	3	4	5
6. Pursued challenging activities.	0	1	2	3	4	5
7. Demonstrated effective written, oral, or visual communication skills.	0	1	2	3	4	5
8. Interacted in a positive way with other students.	0	1	2	3	4	5
9. Used appropriate research skills to solve problems.	0	1	2	3	4	5
10. Demonstrated overall success in the gifted education program.	0	1	2	3	4	5

**Appendix E**

**Parent Questionnaire Regarding Child's Gifted  
Class Performance**

## Parent Questionnaire Regarding Child's Gifted Class Performance

**Instructions.** Please respond to each item below by:

(1) circling the number that best matches the degree to which you have experienced the following attitudes in relation to your child's participation in the gifted class.

(2) providing your comments as requested.

The words that correspond to the five scale values are:

	Very Low Degree	Low Degree	Average Degree	High Degree	Very High Degree
	1	2	3	4	5
<hr/>					
	Very Low	Low	Average	High	Very High
1. The school provides me with enough information about the activities and experiences that my child does in the gifted class.	1	2	3	4	5
2. There are sufficient opportunities to discuss my child's progress with the teacher of the gifted class.	1	2	3	4	5
3. The teachers of the gifted class and I talk about my child's progress and expectations.	1	2	3	4	5
4. At home, my child talks about experiences in the gifted class. The comments my child has made are usually about:	1	2	3	4	5
5. My child expresses pleasure or enjoyment about work done in the gifted class.	1	2	3	4	5
6. Work provided in the gifted class is challenging for my child.	1	2	3	4	5
7. My child is able to handle the challenge provided by the gifted class.	1	2	3	4	5

	Very Low	Low	Average	High	Very High
8. My child has encountered problems with his/her friends since being in the gifted class. These concerns are:	1	2	3	4	5
9. My child feels comfortable in the gifted class.	1	2	3	4	5
10. My child gets along with other students in the gifted class.	1	2	3	4	5
11. Changes in my child's feelings toward learning have occurred since being in the gifted class. Please list any behaviors or attitudes noticed:	1	2	3	4	5
12. Changes in my child's abilities have occurred since being in the gifted class.	1	2	3	4	5
13. There is an increased workload for my child in the gifted class.	1	2	3	4	5
14. My child is motivated to do well in the gifted class.	1	2	3	4	5
15. My child expresses concern about the difficulty of work expected in the gifted class. These concerns are:	1	2	3	4	5
16. My child's performance in the gifted class is important to my child.	1	2	3	4	5
17. The experience of participating in the gifted class is more helpful to my child's education than the regular classes.	1	2	3	4	5
18. The skills taught in the gifted class may help my child to achieve future goals.	1	2	3	4	5
19. The gifted class is helping my child to budget time, organize work, and improve study habits.	1	2	3	4	5

	Very Low	Low	Average	High	Very High
20. There are stresses my child is dealing with because of the gifted class. Stresses are:	1	2	3	4	5
21. The teacher of the gifted class contributes positively to my child's learning.	1	2	3	4	5
22. Other students in the gifted class contribute positively to my child's learning.	1	2	3	4	5

23. Please put additional comments or questions here:



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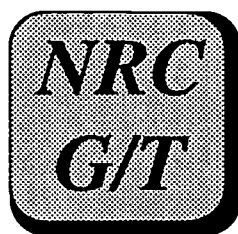
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